<u>**AMENDMENTS TO THE CLAIMS**</u>

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.   (original)   A signal detection system which detects signals similar to a target signal from stored signals which are stored, comprising:

a target signal feature quantity calculation section which derives a feature quantity series from a target signal;

a stored signal feature quantity calculation section which derives a feature quantity series from a stored signal;

a target signal histogram calculation section which sets a predetermined observation window in a feature quantity series derived in said target signal feature quantity calculation section, and calculates a histogram of the feature quantities within said observation window;

a stored signal histogram series calculation section which obtains a histogram series in regard to a feature quantity series derived in said stored signal feature quantity calculation section, by sequentially setting a predetermined observation window with respect to each section of a size which corresponds to said observation window, and calculating a histogram of feature quantities within said observation window;

a stored signal histogram grouping section which groups histogram series sets in a histogram series obtained from said stored signal histogram series calculation section, for which a mutual similarity level calculated with a predetermined L1 distance measure satisfies a predetermined criteria;

a stored signal histogram group selection section which determines the existence of a possibility of the inclusion of an area which should be output from within a histogram group obtained in said stored signal histogram grouping section, and selects the group which has a possibility;

a stored signal collation section which performs collation with respect to histograms belonging to a histogram group selected in said stored signal histogram group selection section, by said predetermined L1 distance measure, and obtains a similarity value; and

a collation result output section which determines whether or not the collated area is to be made a detection result, by the similarity value obtained in said stored signal collation section, and outputs the collated area in a case where it has been determined it is to be made a detection result.

2. (original) A signal detection system according to claim 1, wherein said stored signal histogram grouping section performs histogram grouping based on a threshold value of the L1 distance measure.

3. (previously presented) A signal detection system according to claim 1, wherein there is provided a stored signal histogram thinning section for thinning the histogram in the histogram series obtained in said stored signal histogram series calculation section.

4. (previously presented) A signal detection system according to claim 1, wherein said stored signal histogram grouping section comprises either one of:

a stored signal histogram local grouping section which groups histogram sets in a histogram which are continuous in said histogram series, for which a mutual similarity level satisfies a predetermined criteria, and

a stored signal histogram global grouping section which groups histogram sets in all histograms in said histogram series, for which a mutual similarity level satisfies a predetermined criteria.

5.   (previously presented) A signal detection system according to claim 1, wherein said stored signal histogram grouping section comprises:

a stored signal histogram local grouping section which groups histogram sets in a histogram which are continuous in said histogram series, for which a mutual similarity level satisfies a predetermined criteria, and

a stored signal histogram global grouping section which groups histogram sets in all histograms in said histogram series, for which a mutual similarity level satisfies a predetermined criteria.

6.   (original) A signal detection method for detecting signals similar to a target signal from stored signals which are stored, comprising:

a target signal feature quantity calculation step for deriving a feature quantity series from a target signal;

a stored signal feature quantity calculation step for deriving a feature quantity series from a stored signal;

a target signal histogram calculation step for setting a predetermined observation window in a feature quantity series derived in said target signal feature quantity

calculation step, and calculating a histogram of the feature quantities within said observation window;

a stored signal histogram series calculation step for obtaining a histogram series in regard to a feature quantity series derived in said stored signal feature quantity calculation step, by sequentially setting a predetermined observation window with respect to each section of a size which corresponds to said observation window, and calculating a histogram of feature quantities within said observation window;

a stored signal histogram grouping step for grouping histogram series sets in a histogram series obtained from said stored signal histogram series calculation step, for which a mutual similarity level calculated with a predetermined L1 distance measure satisfies a predetermined criteria;

a stored signal histogram group selection step for determining the existence of a possibility of the inclusion of an area which should be output from within a histogram group obtained in said stored signal histogram grouping step, and selecting the group which has a possibility;

a stored signal collation step for performing collation with respect to histograms belonging to a histogram group selected in said stored signal histogram group selection step, by said predetermined L1 distance measure, and obtaining a similarity value; and

a collation result output step for determining whether or not the collated area is to be made a detection result, by the similarity value obtained in said stored signal collation step, and outputting the collated area in a case where it has been determined it is to be made a detection result.

7.   (original) A signal detection method according to claim 6, wherein said stored signal histogram grouping step performs histogram grouping based on an upper threshold value of the L1 distance measure.

8.   (previously presented) A signal detection method according to claim 6, wherein there is provided a stored signal histogram thinning step for thinning the histogram from the histogram series obtained in said stored signal histogram series calculation step.

9.   (currently amended) A program on a computer-readable medium for executing processing for detecting signals similar to a target signal from stored signals which are stored, for executing on a computer, comprising:

a target signal feature quantity calculation process for deriving a feature quantity series from a target signal;

a stored signal feature quantity calculation process for deriving a feature quantity series from a stored signal;

a target signal histogram calculation process for setting a predetermined observation window in a feature quantity series derived in said target signal feature quantity calculation process, and calculating a histogram of the feature quantities within said observation window;

a stored signal histogram series calculation process for obtaining a histogram series in regard to a feature quantity series derived in said stored signal feature quantity calculation process, by sequentially setting a predetermined observation window with

respect to each section of a size which corresponds to said observation window, and calculating a histogram of feature quantities within said observation window;

a stored signal histogram grouping process for grouping histogram series sets in a histogram series obtained from said stored signal histogram series calculation process, for which a mutual similarity level calculated with a predetermined L1 distance measure satisfies a predetermined criteria;

a stored signal histogram group selection process for determining the existence of a possibility of the inclusion of an area which should be output from within a histogram group obtained in said stored signal histogram grouping process, and selecting the group which has a possibility;

a stored signal collation process for performing collation with respect to histograms belonging to a histogram group selected in said stored signal histogram group selection process, by said predetermined L1 distance measure, and obtaining a similarity value; and

a collation result output process for determining whether or not the collated area is to be made a detection result, by the similarity value obtained in said stored signal collation process, and outputting the collated area in a case where it has been determined it is to be made a detection result.

10. (cancelled)